Docket: 14558.01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named

Inventor:

Brian P. Giffin

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Title:

System and Method for Transferring Blanks

in a Production Line

Confirmation No. 6379

Examiner:

M. Deuble

Group Art Unit:

3651

REPLY BRIEF

Mail Stop Appeal Brief – Patents Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

Status of the Claims begin on page 2 of this paper.

Grounds of Rejection to be Reviewed on Appeal being on page 3 of this paper.

Arguments begin on page 4 of this paper.

Status of the Claims

Claims 1-3, 5-8, and 14 have been allowed. Independent claim 9 and respective dependent claims 10-13 and 15 stand rejected and are the subject of this appeal. Claims 4 and 16-20 are cancelled.

Grounds of Rejection To Be Reviewed On Appeal

Whether claims 9-12 are anticipated under 35 U.S.C. § 102(b) by Cordia (U.S. Patent No. 5,341,915); whether claim 15 is unpatentable under 35 U.S.C. § 103(a) over Long (U.S. Patent No. 5,129,641) in view of Cordia; and whether claim 13 is unpatentable under § 103(a) over Long in view of Cordia and further in view of Delsanto (U.S. Patent No. 5,038,915).

Argument

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1. Rejection under 35 U.S.C. § 102(b) over Cordia et al.

a. Claim 9

The single reference relied upon by the Examiner for the § 102(b) rejection of claim 9 is the Cordia Patent No. 5,341,915.

As a first matter, the Examiner asserts on page 6 of the Examiner's Answer that Applicant mischaracterizes the Examiner's rejection by comparing the phasing conveyors 22 and 25 to the first conveyor of the claims and comparing the transfer conveyors 23 and 26 to the second conveyor of the claims. However, the Examiner asserts that, in the Examiner's analysis, the first conveyor is formed by sections 20 and 21 (which includes phasing conveyors 22 and 25 and transfer conveyors 23 and 26) and the second conveyor is formed by the conveyor 11. It is not clear how the Examiner is bending Applicant's claim language to fit such a characterization. Particularly, in the Examiner's analysis, as pointed out by the Examiner, sections 20 and 21 are formed by four separate conveyors, two (23 and 26) of which run at a constant velocity, the constant velocity being equivalent to the velocity of the target conveyor 11, and the other two (22 and 25) of which at least run at a different velocity than conveyors 23 and 26 and in many instances run at velocities that are not equivalent to each other.

Applicant's claim 9 recites "advancing the plurality of blanks by said first conveyor toward a second conveyor at a first velocity..." According to the description and figures of Cordia, the trays in Cordia are not traveling at a first velocity over sections 20 and 21. In fact, as described above, the trays travel across sections 20 and 21, comprising conveyors 22, 23, 25, and 26, at varying velocities. A first velocity over phasing conveyor 25, a second velocity over transfer conveyor 26, a third velocity over phasing conveyor 22, and a fourth velocity (equal to the second velocity) over transfer conveyor 23. Therefore, the trays in Cordia do not advance at a first velocity. Often times, the trays will travel over sections 20 and 21 at three different velocities.

Additionally, Applicant's claim 9 recites "... said second conveyor traveling at a second velocity and said second velocity being greater than said first velocity." In the Examiner's

analysis, the Examiner compares the target conveyor 11 to Applicant's second conveyor. As described on column 9, lines 8-10 and illustrated in the figures of Cordia, the velocity V_5 of the target conveyor 11 is the same as the velocity V_4 of phasing conveyors 22 and 25. Therefore, sections 20 and 21 comprise conveyors that have velocities V_4 that are the same as the velocity V_5 of the target conveyor. As such, under the Examiner's analysis, Cordia does not disclose "advancing the plurality of blanks by said first conveyor toward a second conveyor at a first velocity, said second conveyor traveling at a second velocity and said second velocity being greater than said first velocity."

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However, even using the characterization of Applicant's claim language as understood by the Examiner in the Examiner's analysis, Cordia does not disclose the method of claim 9.

As stated in Applicant's Appeal Brief, independent claim 9 is directed to a method of transferring blanks including, among other things, the steps of detecting, accelerating, transferring, and decelerating with respect to a given blank and repeating such detecting, accelerating, transferring, and decelerating steps for each subsequent blank. The Examiner's position is that Cordia discloses a method of delivering articles, which could be blanks, including the steps of detecting, accelerating, transferring, and decelerating with respect to a given article and repeating the steps of detecting, accelerating, transferring, and decelerating for each subsequent article. Applicant traverses the Examiner's position.

In Cordia, a series of conveyors is disclosed for transferring articles from an initial low friction accumulation conveyor 12 traveling at a velocity V_1 to a target conveyor 11 traveling at a faster velocity V_5 . This series of conveyors includes a first phasing/transfer conveyor section 20 and a second phasing/transfer conveyor section 21. The conveyor sections 20, 21, and 11 are the conveyors upon which the Examiner relies for his rejection. Each of the conveyor sections 20 and 21 includes a phasing conveyor and a transfer conveyor. Specifically, the conveyor section 20 includes the phasing conveyor 25 and the transfer conveyor 26, while the conveyor section 21 includes the phasing conveyor 22 and the transfer conveyor 23.

Both of the phasing/transfer conveyor sections 20 and 21 function in the same manner, with the velocities of each of their respective transfer conveyors 26 and 23 being constant and

traveling at the same velocity V_5 as the target conveyor 11. In contrast, each of their respective phasing conveyors 25 and 22 is operated by a servo motor, which can either accelerate the conveyors 25 or 22, decelerate the conveyors 25 or 22, or simply maintain the velocity of the conveyors 25 or 22 at their current velocity. The velocities of the phasing conveyors 25 and 22 are not synchronized with each other except when they are at their normal operation velocity V_3 , which is slower than the velocity V_4 of the transfer conveyors 26 and 23 by a factor of approximately 1.6. Each phasing conveyor 25 and 22 can accelerate, decelerate, or maintain velocity independently of the other. As described in Cordia in column 10, lines 61-66, the phasing conveyor 22 provides any needed "touch-up" alignment of the trays after the phasing conveyor sections 20 and 21 results in a conveyor comprising four separate conveyors, two (23 and 26) of which run at a constant velocity V_4 , the constant velocity V_4 being equivalent to the velocity V_5 of the target conveyors 23 and 26 and in many instances run at velocities that are not equivalent to each other.

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The Examiner incorrectly asserts on page 3 of the Examiner's Answer that conveyor sections 20 and 21 accelerate the trays from a first velocity to a second velocity that matches the velocity of the target conveyor 11. Although it is true that Cordia discloses that the phasing conveyors 25 and 22, in some cases, might accelerate from a first velocity V_3 to a second velocity, the second velocity does not <u>match</u> the velocity V_5 of the target conveyor 11. The Examiner asserts on page 7 of the Examiner's Answer that Applicant has merely argued that the objective of Cordia is completely different than the objective of Applicant's invention and asserts that this amounts to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from Cordia. However, a comparison of the objectives of Cordia and Applicant's invention is necessary to illustrate that the velocities of the conveyor sections 20 and 21, described in Cordia, are not accelerated to "match" the velocity V_5 of the target conveyor 11.

The main function of the phasing/transfer conveyor sections 20 and 21 is to transfer trays from the accumulation pre-phasing conveyor 15, in which adjacent articles are non-uniformly

spaced, to the target conveyor in a manner that uniformly spaces adjacent trays a desired distance from one another such that the trays may be received appropriately in segments S of the target conveyor. Specifically, the phasing/transfer conveyor sections 20 and 21, which are comprised of the phasing conveyors 25 and 22 and the transfer conveyors 26 and 23, receive trays from the accumulation conveyor 15, in which the spacing is not uniform, adjust the spacing via the phasing conveyors 25 and 22, and then transfer the properly spaced trays to the faster moving transfer conveyors 26 and 23. The articles are then further transferred from the transfer conveyor 23 to the target conveyor 11. In other words, the objective of Cordia is to align the trays such that the trays appropriately fill sections S of the target conveyor 11. In order to do so, Cordia describes independently accelerating, decelerating, or maintaining the velocities of phasing conveyors 25 and 22. However, and importantly, the velocities of the phasing conveyors need not "match" the velocity of the target conveyor 11, which at normal operation velocities is running at 1.6 times the velocity of the phasing conveyors 25 and 22. In fact, it may often times be inappropriate to "match" the velocity of the phasing conveyors 25 and 22 to the velocity of the target conveyor 11.

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Accordingly, the objective and operation of the transfer method of Cordia and the objective and operation of the transfer method of the present invention as set forth in independent claim 9 are completely different. First, the objective of Cordia is to insure that trays are transferred from the phasing conveyor 22 to the transfer conveyor 23 with appropriate spacing relative to sections S of the target conveyor 11. Cordia is not concerned about transfer between conveyors traveling at different velocities. In fact, the transfer from the conveyor 22 to the conveyor 23, for example, occurs when such conveyors 22 and 23 are traveling at different velocities, which is in full contrast to the present invention. The objective of the present invention is to transfer blanks from a normally slower moving conveyor to a faster moving conveyor at a point in time when the conveyors are temporarily moving at the same velocity.

In addition to Applicant's assertion that the phasing conveyors 25 and 22 are not accelerated from a first velocity to a second velocity, wherein the second velocity matches the velocity of the target conveyor 11, Applicant continues to maintain that the phasing conveyors 25 and 22 are not accelerated to the velocity of their respective transfer conveyors 26 and 23. In

fact, the clear disclosure is that the normal operating velocity of the transfer conveyors 26 or 23 is constant and 1.6 times the velocity of their respective phasing conveyors 25 and 22. When phasing conveyors 25 and 22 are accelerated or decelerated, they are not accelerated or decelerated to match the velocity of the transfer conveyors 26 and 23, but rather accelerated or decelerated to correct the spacing of the trays with respect to sections S of the transfer conveyor 11. Thus, the claim 9 step of accelerating the first conveyor "from the first velocity to substantially match the second velocity" is not present or disclosed in Cordia under either Examiner's or Applicant's characterization of Cordia.

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Applicant also continues to maintain that Cordia does not disclose a method involving the steps of "detecting, accelerating, transferring, and decelerating" with respect to each given blank. As disclosed in Cordia, as discussed in Applicant's Response filed October 26, 2005, and as acknowledged by the Examiner in the final action of January 12, 2006, the phasing conveyors 22 and 25 of Cordia are either accelerated, decelerated, or maintained at the same velocity. Thus, as each tray in the Cordia system is detected, the phasing conveyors are either accelerated, decelerated, or maintained at the same velocity in response to the detecting step. Accordingly, for each tray in the Cordia system, there is a detection, followed by an acceleration, deceleration, or maintenance at the same velocity, followed by a transfer. The three-step cycle of (1) detecting, (2) accelerating, decelerating, or maintenance at the same velocity, and (3) transfer are then repeated for each successive tray. In other words, there is no deceleration step following the transfer step and prior to the next detection step in Cordia as is required by claim 9. In Cordia, it appears that as soon as the transfer from the conveyor 22 to the conveyor 23 is made, for example, the phasing conveyor 22 maintains that same velocity (whether it is an accelerated velocity, a decelerated velocity, or the same velocity) until the detection of the next tray is made. Following the next detecting step, the detected tray is then again, depending upon the position of the detected article, either accelerated, decelerated, or maintained at the same velocity, followed again by the transfer.

The Examiner asserts on page 8 of the Examiner's Answer that the "phasing conveyor would inherently return to [the] normal velocity after an article is accelerated and transferred, and in doing so, the first conveyor would be decelerated as required by [claim 9]." However,

Cordia provides no disclosure as to whether the phasing conveyors are decelerated back to normal operating velocity after the phasing conveyors had been accelerated (or accelerated back to normal operating velocity after the phasing conveyors had been decelerated). Applicant asserts that it is at least equally inherent that the phasing conveyors do not return to the normal operating velocity V_3 after the conveyors have been accelerated or decelerated based on the detection of a misaligned tray. Instead, following the transfer, the next tray is merely detected and the velocity of the phasing conveyor is adjusted accordingly. Such adjustment could be an acceleration, deceleration, or no change at all. Therefore, Cordia does not disclose "decelerating the first conveyor to the first velocity after said accelerating step . . .," as recited in Applicant's claim 9.

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Fourth, in direct contrast to the Examiner's assertion, claim 9 clearly requires that the steps of detecting, accelerating, transferring, and decelerating be repeated for each of said subsequent blanks. The Examiner asserts on page 9 of the Examiner's Answer that nothing in claim 9 requires the conveyor to accelerate for every blank in a given set. Additionally, the Examiner asserts on page 4 of the Examiner's Answer that the claims do not require that the first conveyor is always accelerated in response to the detecting step and that claim 9 only requires that the first conveyor be accelerated in response to the detecting step for a number of subsequent blanks. It is not clear to the Applicant where the Examiner is reading that claim 9 only requires accelerating in response to the detecting step for only a number of subsequent blanks, nor is it clear to Applicant how the Examiner is interpreting claim 9 to not require the accelerating step for each subsequent blank since claim 9 plainly recites "dispensing a plurality of blanks . . ." and "repeating said detecting, accelerating, transferring and decelerating steps for each said subsequent blank" (emphasis added). As defined in the "decelerating" step language of claim 9, a "subsequent blank" is the blank "immediately adjacent to said given blank." Thus, claim 9 clearly requires that steps of detecting, accelerating, transferring, and decelerating be repeated for each of said subsequent blanks, wherein a subsequent blank is the blank immediately adjacent to said given blank.

The Examiner further asserts on page 9 of the Examiner's Answer that even if assumed for the sake of argument that the claims require the steps to be repeated for every blank, it should

be noted that the steps would be repeated for every blank under the normal operation of Cordia when the blanks are fed to the first conveyor by the conveyor 15 with spacing that is consistently too large. Applicant believes that the Examiner has misunderstood the operation of the system disclosed in Cordia. As provided above, the objective of Cordia is to insure that trays are transferred from the transfer/phasing conveyor sections 20 and 21 to the target conveyor 11 with equal spacing such that the trays fill segments S of the target conveyor 11 appropriately. If the spacing between trays as they are received from the conveyor 15 is consistently too large, operation of the system in Cordia remains the same as previously described and the phasing conveyors 25 and 22 will still either be accelerated, decelerated, or maintained at the same velocity depending on where the tray ultimately needs to be positioned to fit into a section S on the target conveyor 11. The spacing between a first tray and the immediately subsequent tray has no bearing on whether the phasing conveyors 25 and 22 are accelerated, decelerated, or maintained at the same velocity. Rather, the positioning of the trays with respect to the segments S on the target conveyor 11 control whether the phasing conveyors 25 and 22 need to be accelerated, decelerated, or maintained at the same velocity.

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Accordingly, neither independent claim 9 nor any claims dependent from claim 9 are anticipated by Cordia under 35 U.S.C. § 102(b).

b. Claim 10

Claim 10 depends directly from claim 9 and is thus patentable for at least the same reasons as claim 9.

Claim 10 further requires decelerating the first conveyor after a predetermined period of time has elapsed after said accelerating step. In Cordia, as indicated above, there is no disclosure relating to such deceleration step. Even in the situation where a detected tray and the preceding tray are too closely spaced so that momentary deceleration is needed, there is not necessarily a preceding acceleration step from which a period of elapsed time can be measured. Even if there were a deceleration step disclosed in Cordia, the time elapse between accelerating and decelerating the phasing conveyors would not be predetermined, but would depend on the space adjustment needed between trays. The time elapsed would inherently vary with a non-uniform stream of trays and could, therefore, not be predetermined.

The Examiner confirms on page 9 of the Examiner's Answer that Cordia does not detail a deceleration step of the phasing conveyors. However, the Examiner asserts that, some period of time, however small, must inherently elapse between the accelerating step and the beginning of the decelerating step. First, the Examiner assumes that there is a decelerating step disclosed in Cordia, when there is not. Second, as indicated above, even if there were a deceleration step disclosed in Cordia, the time elapse between accelerating and decelerating the phasing conveyors would not be predetermined, but would depend on the space adjustment needed between trays. The time elapsed would inherently vary with a non-uniform stream of trays and could, therefore, not be predetermined.

c. Claim 11

Claim 11 depends directly from claim 10 and ultimately from claim 9 and is thus patentable for at least the same reasons as claims 9 and 10.

Claim 11 further requires calculating the predetermined period of time with a controller. To the extent Cordia discloses a deceleration step, it is not based on a predetermined time and is not calculated with a controller. In fact, deceleration, to the extent it occurs, is a function of how fast the phasing conveyors 25 and 22 are moving relative to the transfer conveyors 26 and 23 and the position of the detected tray on the conveyor sections 20 and 21.

d. Claim 12

Claim 12 depends directly from claim 11 and ultimately from claims 9 and 10 and is thus patentable for at least the same reasons as claims 9, 10, and 11.

Claim 12 further requires the calculating step being based on a length of the given blank, the first velocity, and the second velocity. No such calculating step is disclosed or occurs in Cordia.

2. Rejection under 35 U.S.C. § 103(a) of Claim 15 over Long in View of Cordia et al.

In response to the Applicant's Appeal Brief, the Examiner asserts on page 10 of the Examiner's Answer that the Applicant argues against Cordia and Long individually rather than

against the combined teachings of the references. Applicant asserts that the Examiner's assertion is inaccurate, and the Applicant has clarified the remarks relating to the §103(a) rejection over Long in view of Cordia. Claim 15 further requires the second conveyor to include upper and lower belt members in a nip in which the transferring step occurs by conveying the given blank into the nip.

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As an initial matter, dependent claim 15 depends immediately from independent claim 9 discussed above with respect to the § 102 rejection and is considered patentable for at least the same reasons as claim 9. That is, Cordia does not disclose each of the limitations recited in claim 9. Particularly, Cordia at least does not disclose "accelerating the first conveyor from the first velocity to substantially match the second velocity in response to detecting the position of said given blank," "decelerating the first conveyor to the first velocity after said accelerating step," nor "repeating said detecting, accelerating, transferring and decelerating steps for each said subsequent blank."

On page 5 of the Examiner's Answer, the Examiner asserted that "Long shows generally all required by the claims except for a controller operably coupled to the servo motor and the blank detector which increased the speed of the feeder conveyor from the first velocity to the second velocity in response to the blank detector detecting the position of a given blank and to decrease the feeder conveyor from the second velocity to the first in response to the blank detector detecting the position of a given blank." However, Long does not remedy any of the fundamental disclosure deficiencies of Cordia, including "accelerating the first conveyor from the first velocity to substantially match the second velocity in response to detecting the position of said given blank," "decelerating the first conveyor to the first velocity after said accelerating step," or "repeating said detecting, accelerating, transferring and decelerating steps for each said subsequent blank."

Long is directed to a multi-stage dispenser for delivering cards or the like and includes a plurality of conveyor stages 18A, 18B, and 18C. The sole purpose of the invention of Long is to dispense cards to advance and fill gaps in a feed sequence while the leading card is temporarily resting at the command location. Although each of the three conveyor stages 18A, 18B, and 18C is independently controlled, the speed at which these conveyors operate, when they are actuated,

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is the <u>same</u> and is <u>constant</u>. Further, each of the conveyor stages 18A, 18B, and 18C are either in a stopped or rest position or a moving position operating at a fixed, constant velocity.

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The Examiner asserts that Long discloses a feeder conveyor 18B which is capable of acceleration from a first velocity to a second velocity and deceleration from the second velocity to the first velocity. Applicant disagrees since, as mentioned above, the conveyor 18B is either stopped (with zero velocity) or is moving at its operational speed, which the Examiner is considering to be its second velocity. Although it can be argued that zero velocity is a first velocity, the analysis breaks down when the requirements of claim 9 are more closely reviewed. For example, claim 9 requires "advancing the plurality of blanks by said first conveyor toward a second conveyor at a first velocity." If the first velocity is zero, such advancement cannot and will not occur.

Further, although each of the conveyor stages in Long operates independently from each other, the drive motors 36A, 36B, and 36C are electrically interconnected whereby drive motors 36B and 36C are slaves to the drive motor 36A and drive motor 36C is slave to the drive motor 36B (column 2, lines 22-25). Thus, when any of the stages 18A, 18B, or 18C is actuated, each preceding stage is actuated as well. This means that if stage 18A is activated, both stages 18B and 18C will be actuated as well. Similarly, if stage 18B is actuated, stage 18C will be actuated as well. This configuration of the motors 36A, 36B, and 36C and stages 18A, 18B, and 18C is required to achieve the objective of Long. This is totally different than the system of the present invention as presently claimed.

Particularly, claim 9 requires "advancing the plurality of blanks by said first conveyor toward a second conveyor at a first velocity, said second conveyor traveling at a second velocity and said second velocity being greater than said first velocity." Long does not disclose a first and second conveyor, wherein the second conveyor travels a velocity that is greater than the first conveyor. For example, stage 18B, which the Examiner asserts is comparable to the first conveyor of Applicant's claim 9, never travels at a velocity that is less than stage 18A, which the Examiner asserts is comparable to the second conveyor of Applicant's claim 9. In other words, stage 18A (second conveyor) never travels at a velocity that is greater than the velocity of stage 18B (first conveyor). Stage 18B either travels at a velocity that is greater than stage 18A, when

stage 18A is stopped, or travels at a velocity that is equal to stage 18A, when 18A is not stopped. This is due to the configuration of the motors 36A, 36B, and 36C and stages 18A, 18B, and 18C described above. Therefore, Long does not disclose "advancing the plurality of blanks by said first conveyor toward a second conveyor at a first velocity, said second conveyor traveling at a second velocity and said second velocity being greater than said first velocity" (emphasis added).

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Further, during operation of the device of Long, the photodetectors do not function to accelerate any of the conveyor stages as required by the claims, but instead function to stop them. In other words, arrival of a card at a position where it is detected by the photocell indicates that the demand is satisfied and its corresponding conveyor stage stops its respective drive motor. See discussion in column 2, lines 42-54. Specifically, acceleration or actuation of the conveyor stages from a stopped position to an accelerated position is not triggered by the photodetector detecting the leading edge of a given blank, but rather by a card being dispensed from the conveyor stage 18A to a subsequent system. Therefore, Long does not disclose "accelerating the first conveyor from the first velocity to substantially match the second velocity in response to detecting the position of said given blank" nor "decelerating the first conveyor to the first velocity after said accelerating step."

Because Long does not disclose an accelerating step or decelerating step as recited in claim 9, Long also does not disclose "repeating said detecting, accelerating, transferring and decelerating steps for each said subsequent blank," as required by the limitations of claim 9.

The bottom line is that even if Long and Cordia are combined in the manner suggested by the Examiner, the required method steps of independent claim 9 and dependent claim 15 are not met. Still further, Applicant maintains that even if they were somehow met, which they are not, the operation and function of both Long and Cordia are so different that it would not have been obvious to a person skilled in the art to make that combination. Specifically, Long is directed to a method and apparatus for delivering the cards or the like in sequence from a stack of cards to a demand location through a plurality of conveyor stages. As disclosed, each of the conveyor stages is either at a zero velocity or is advancing at a given, constant velocity. None of the conveyors operates or is capable of operating at two different non-zero velocities as required by Cordia. Further, Long requires and claims when a stage of the conveyor system is actuated, each

preceding stage is also simultaneously actuated. Modifying this structure and operation of Long as suggested by the Examiner, in accordance with the teachings of Cordia, would be completely contrary to the teachings of Long and thus not obvious.

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Accordingly, dependent claim 15 is patentable.

3. Rejection under 35 U.S.C. § 103(a) of Claim 13 over Long in View of Cordia et al. and Delsanto

As an initial matter, dependent claim 13 depends immediately from claim 11 and ultimately from independent claim 9 discussed above with respect to the § 102 rejection and is considered patentable for at least the same reasons as claim 9. That is, Cordia does not disclose each of the limitations recited in claim 9. Particularly, Cordia at least does not disclose "accelerating the first conveyor from the first velocity to substantially match the second velocity in response to detecting the position of said given blank," "decelerating the first conveyor to the first velocity after said accelerating step," nor "repeating said detecting, accelerating, transferring and decelerating steps for each said subsequent blank." Furthermore, as discussed above with respect to Claim 15, Long does not remedy any of the fundamental disclosure deficiencies of Cordia, including "accelerating the first conveyor from the first velocity to substantially match the second velocity in response to detecting the position of said given blank," "decelerating the first conveyor to the first velocity after said accelerating step," or "repeating said detecting, accelerating, transferring and decelerating steps for each said subsequent blank."

Further, Applicant maintains that although Delsanto appears to teach entering the length of the articles to be synchronized into the PLC 84 via the thumb wheel switch 70, Delsanto fails to disclose entering first and second velocities into the controller as required in claim 13. As described in the present application, a machine operator actually enters the blank length, the carrier section belt speed, and the feeder section belt speed into a user interface which is shown in Figure 5. These velocities are predetermined, known velocities or speeds. If the difference between the two belt speeds is too great for the feeder to accelerate/decelerate within the given box length, the operator is prompted to increase the feeder speed to a calculated feeder speed which the feeder's acceleration can achieve within the given box length. See discussion on page 13, lines 1-6 of the present application.

In Delsanto, no such velocities are entered into the controller. Rather, the speeds are merely monitored so that the apparatus of Delsanto is synchronized.

Accordingly, dependent claim 13 is patentable.

Conclusion

In view of the foregoing, Applicant respectfully submits that the Examiner's rejections of claims 9-12 under 35 U.S.C. § 102(b) and claims 13 and 15 under 35 U.S.C. § 103(a) are without merit and should be reversed. Accordingly, the allowance of claims 9-13 and 15 is respectfully requested.

Respectfully submitted,

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